

## ABSTRACT

Input image data inputted in an image block of  $m$  pixels  $\times$   $n$  pixels is changed in the size of the image block; image data of the image block changed in size is subjected to compression processing; compressed image data obtained by the compression processing is subjected to expansion processing to generate restored image data in the  $m$ -pixel  $\times$   $n$ -pixel image block; and whether or not the size of the image block is further changed is judged based on the strength of the correlation between the restored image data and the input image data. The compression processing is performed on the image data while change in size of the image block is repeated until the correlation between the restored image data and the input image data is strong, thereby making it possible to perform compression processing on the image data of the input image at a high compression ratio while maintaining the image quality of the restored image.